



\$695

Model Shown

PX5500 Series

4-20mA Output
0-15 to 0-10,000 psi
0-1 to 0-700 bar

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 Atmosphere = 14.7 psi = 29.93 in-Hg = 760.2 mm-Hg = 1.014 bar

- ☑ High Accuracy 0.1%
- ☑ Solid State Reliability
- ☑ Sputtered Strain Gage Design
- ☑ High Shock and Vibration
- ☑ Low Drift

Applications

- ☑ Testing
- ☑ R&D/Engineering Test Laboratories
- ☑ Functional Test Systems
- ☑ Production Testing
- ☑ Product Quality Assurance
- ☑ Flight Testing
- ☑ Gas Turbine and Engine Test Standards
- ☑ Ground Support Equipment
- ☑ Hydraulic Systems
- ☑ Custody Transfer Measurements

For Sales and Service
In U.S.A. and Canada

1-800-872-3963
1-800-USA-DYNE

International Customers Dial
(614) 965-9340
24-Hour FAX (614) 965-9438

OMEGADYNESM FAX

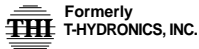
OMEGADYNE's 24-Hour
On-Line Publishing Service

1-800-344-3963
1-800-DIG-DYNE

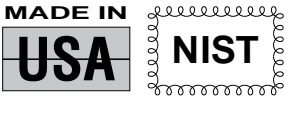
Document # 3688

OMEGADYNE, Inc.

149 Stelzer Court, Sunbury, OH 43074
<http://www.omegadyne.com>
e-mail: info@omegadyne.com



© COPYRIGHT 1996 OMEGADYNE, INC. ALL RIGHTS RESERVED.

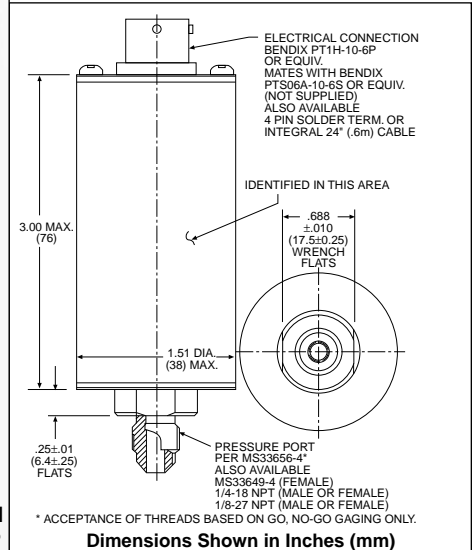


Interchangeable with **SPEC SHEET**
CEC Model 5500-xxxx **PX5500-I**

High Performance Pressure Transmitter
Long Term Reliability



Model PX5500L1-100GI
Shown Smaller Than Actual Size



► **Most Popular Models Highlighted** ◀

Prices Shown in U.S. Dollars

To Order: (Specify Model Number)			
Models with 4-20mA Output, MS33656-4 Connection, Integral Connector			
Range (psi)	Model Number	Price	Compatible Meters
Absolute Pressure (All Ranges Available in Absolute Pressure)			
0-15	PX5500L1-015AI	695	INFP, INFPCP, IDP
0-25	PX5500L1-025AI	695	INFP, INFPCP, IDP
0-50	PX5500L1-050AI	695	INFP, INFPCP, IDP
0-100	PX5500L1-100AI	695	INFP, INFPCP, IDP
Gage Pressure (All Ranges also Available in Sealed Gage Pressure)			
0-15	PX5500L1-015GI	695	INFP, INFPCP, IDP
0-25	PX5500L1-025GI	695	INFP, INFPCP, IDP
0-50	PX5500L1-050GI	695	INFP, INFPCP, IDP
0-100	PX5500L1-100GI	695	INFP, INFPCP, IDP
0-250	PX5500L1-250GI	695	INFP, INFPCP, IDP
0-500	PX5500L1-500GI	695	INFP, INFPCP, IDP
0-1,000	PX5500L1-1KGI	695	INFP, INFPCP, IDP
0-1,500	PX5500L1-1.5KGI	695	INFP, INFPCP, IDP
0-2,500	PX5500L1-2.5KGI	695	INFP, INFPCP, IDP
0-3,000	PX5500L1-3KGI	695	INFP, INFPCP, IDP
0-5,000	PX5500L1-5KGI	695	INFP, INFPCP, IDP
0-10,000	PX5500L1-10KGI	695	INFP, INFPCP, IDP

Interchangeable with CEC Model 5500-xxxx Metric Ranges Available - Consult Engineering

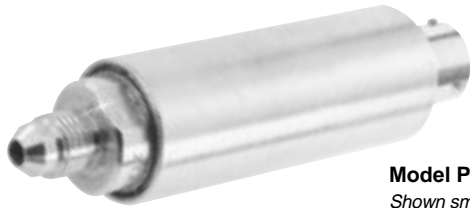
To order Absolute Pressure models, change "G" in the part number to "A". No charge.
To order Sealed Gage models, change "G" in the part number to "S". No charge.

Ordering Examples: 1.) **PX5500L1-1KSI** is a 1,000 psi Sealed Gage transducer with 4-20 mA output, PT1H-10-6P electrical connection and MS33656-4 Male Pressure Port, \$695. Mating Connector (not included) **PTS06A-10-6S**, \$47 ea. 2.) **PX5500L1-100AI** is a 100 psi Absolute Pressure transducer with 4-20 mA output, PT1H-10-6P electrical connection and MS33656-4 Male Pressure Port, \$695. Mating Connector (not included) **PTS06A-10-6S**, \$47 ea.

Printed On Recycled Paper



Wiring Code	
Pin	Wire Function
A	RD + Input
B	YE No Con
C	BL No Con
D	WT - Input
E	No Connection
F	No Connection



Model PX5000L1-100GI
Shown smaller than actual size

The OMEGADYNE™ Transducer Series PX5500 provide high performance in demanding industrial and research applications where accuracy, reliability, and price are important. These transducers have a 10 year MTBF rate and are stable to 0.1% of FSO over an 18 month period. This translates into less down time, fewer test reruns, more time between calibrations, and high confidence in your pressure data. When recalibration is impossible, relying on the high stability of the PX5500 Series transducer may be the only cost-effective way to obtain pressure data over the long term. OMEGADYNE's thin film technology makes this premium performance possible. The strain gages and associated structures are sputter-deposited directly onto the pressure sensing element thus eliminating the need for adhesives. The resulting molecular bond between the sensing element and the strain gages ensures virtually no shifting, drifting, or "creep" in the performance of the transducer. The micro-geometry design of the PX5500 sensing element results in a very small, low mass sensor that reduces effects of mechanical vibration and shock. The PX5500 gives you the accuracy, reliability, and stability at competitive prices.

SPECIFICATIONS: (mA Models)

- Electrical:**
- Excitation:** 10 to 40 Vdc unregulated
Reverse Polarity Protected
- Output (FSO):** 4-20mA ±2mA adj
- Zero Balance:** 4mA ±0.4mA adj
- Input Current:** 20mA max. with no load
- Load Impedance:** 50 (V-10) ohms max where V is supply voltage (40Vdc max)
- Insulation Resistance:** 100 Megohms @ 45 Vdc between all pins shorted together and case
- Electrostatic Discharge:** Protected to 15kV max.
- Sensing Element:** 4 active-arm bridge using sputtered-deposited thin-film elements
- Performance:**
- Accuracy:** Combined Linearity, Hysteresis and Repeatability: ±0.10% FSO (BFSL) <1000 psi ±0.15% FSO 1000 psi and above
- Environmental:**
- Vibration Sensitivity:** At 20g peak sinusoidal vibration from 10 Hz to 2000 Hz (½ D.A.), the output shall not exceed 0.04% FSO/g for 15 psi range, decreasing to 0.003% FSO/g for 1000 psi and above
- Natural Frequency:** 5 kHz for 15 psi, increasing logarithmically to 50 kHz for 5,000 psi

Shock: Qualification level of 100g, 11 milliseconds half sine wave without damage

Operating Temp Range: -40° to +85°C (-40° to +185°F)

Compensated Temp Range: -18° to +82° C (0° to +180°F)

Thermal Effects: (Over the compensated range)
Span: ±0.02% FSO/°F
Zero: ±0.02% FSO/°F

Pressure:

Proof Pressure: 2.0 times rated pressure or 15,000 psi, whichever is less, will not cause changes in performance beyond the specified tolerance

Burst Pressure: 3.0 times rated pressure or 20,000 psi whichever is less, will not cause rupture of the pressure containment cavity

Mechanical:

Wetted Parts: 17-4 PH or 15-5 PH Stainless Steel

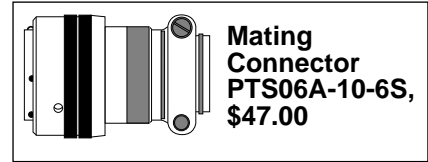
Electrical Connection: PT1H-10-6P standard - see custom configurations

Pressure Port: MS33656-4 (Male), standard - see custom configurations

Optional: MS33649-4, ¼"-18 NPT Male/Female, ⅜"-27 NPT Male/Female

Mating Connector: PTS06A-10-6S (not included)

Weight: 8 oz (225g) maximum



CUSTOM CONFIGURATIONS

SERIES	PRESSURE PORT	ELECTRICAL CONNECTION	RANGE	UNITS	OUTPUT	OPTIONS
PX5500*	[1]	[2]	[3]	[4]	[5]	[6]
	A = ¼"-27 NPT Male		015 psi	A, G, S	V = mV/V \$550	CAL5 = 5pt Cal
	B = ¼"-27 NPT Female		025	A, G, S	5T = 0-5V \$695	+ \$75
	C = ¼"-18 NPT Male		050	A, G, S	I = 4-20mA \$695	CAL11 = 11pt Cal
	D = ¼"-18 NPT Female		100	A, G, S		+ \$150
	L = MS33656-4		250	A, G, S		
	M = MS33649-4		500	A, G, S		
	0 = 2 ft (.6m) cable		1K	A, G, S		
	\$2/ft over 2 ft		1.5K	A, G, S		
	1 = PT1H-10-6P Connector		2.5K	A, G, S		
	(or Equal)		3K	A, G, S		
	Mating Connector (not included)		5K	A, G, S		
	PTS06A-10-6S		10K	A, G, S		
	\$47					
	3 = 4 - Pin Eyelet Header					

To Order a Custom Configuration:

1. Select a Pressure Port
2. Select Electrical Connection
3. Select a Pressure Range
4. Select Pressure Units
5. Select Output
6. Select Options and Agency Approvals

*For 350 ohm bridge on mV/V models specify Model PX5503

Interchangeable with CEC Model 5500-xxxx

Metric Ranges Available - Consult Engineering

- Ordering Examples:** 1.) PX5500A1-015AV has a 1000 ohm bridge, ¼"-27 NPT male pressure port, Bendix style connector, 15 psi Absolute Pressure range and mV/V output, \$550. Mating connector (not included) PTS06A-10-6S, \$47.00.
 2.) PX5503C1-100SV has a 350 ohm bridge, ¼"-18 NPT male pressure port, Bendix style connector, 100 psi Sealed Gage pressure range and mV/V output, \$550. Mating connector (not included) PTS06A-10-6S, \$47.00.
 3.) PX5500M1-10KG5T has a 1000 ohm bridge, MS33649-4 female pressure port, Bendix style connector, 10,000 psi Gage Pressure range and 0-5 Vdc output, \$695. Mating connector (not included) PTS06A-10-6S, \$47.00.
 4.) PX5500L0-015AI-25FT has a 1000 ohm bridge, MS33656-4 male pressure port, 25 ft (8m) lead wire, 15 psi Absolute Pressure range and 4-20mA output, \$695+46= \$741.

Look for OMEGADYNE Products on the World Wide Web!

<http://www.omegadyne.com>

e-mail: info@omegadyne.com